**Amendments to the Specification:**

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Please replace paragraph [0003] with the following amended paragraph:

[0003] A pouch making machine as disclosed in U.S. Patent No. 5,800,325 is an example of a web production method that employs a transverse web cutter. FIG. 1 is a schematic side view of an exemplary pouch making machine. The pouches fabricated by the machine of FIG. 1 start out as two webs of pouch material 11 and 12. These two webs are joined by being seamed together to form a single web 110. The seaming iron 18 used to create the perimeter seams on the pouches may simultaneously form the seams for a number of pouches along the length of the web 110. The seaming iron may be any number of pouches wide, as is economical under the circumstances. ~~Two webs~~ The two webs of sheet stock 11 and 12 are fed into the pouch making machine from two rolls 13 and 14. The webs 11 and 12 are drawn into the machine by rollers 15/16. One or both of these rollers are driven by a motor 17. The motion is intermittent in that the webs are drawn rapidly into the machine for a period of time, and then the motion stops for some other period of time to allow the perimeter seams of the pouches to be made ~~by a hot~~ by the hot seaming iron 18 being pressed against a platen 19. The seaming iron 18 is pressed against the platen 19 by one or more hydraulic or pneumatic actuators 22 under the control of a first control system 21. A sensor 20 may provide a signal to the first control system 21 to indicate the position or speed of the web. A typical duration for the seaming process and subsequent cooling is about two seconds.

Please replace paragraph [0027] with the following amended paragraph:

[0027] In the web transport system of the exemplary transverse web cutter 10, the web 110 is clamped by two clamps 39 that engage the web 110 just ahead and just behind the line where the web is to be severed to release a finished product 111. In this web cutter 10, a second motor 36 operates the clamps 39. The second motor rotates a cam 40 which lifts the support bars 41 by means of a push rod and cam follower 42. The support bars may be spring loaded to urge the support bars downward. When the support bars 41 are permitted to lower by rotation of the ~~cam 40~~ cam 40, the clamps 39 engage the web 110. The web transport system provides a synchronization signal at a known point in each cutting cycle. The synchronization signal may be derived from any source that provides a reasonably consistent point of reference for the time when the web will be stopped and ready for cutting. The synchronization signal ~~may be a~~ may be at some point in the cutting cycle before the time when the web should be cut. It will be appreciated that regardless of where in the cutting cycle the synchronization signal occurs, the synchronization signal will always precede a cutting operation by no more than the length of one cutting cycle.

Please replace paragraph [0034] with the following amended paragraph:

[0034] The control system 29 uses the position signal provided by the ~~sensor 37~~ sensor 37, 43 to adjust subsequent actuating signals so that the cutting knife 27 arrives at the predetermined position at a predetermined time relative to the synchronization signal. The control system 29 may use the position signal to determine the length of time between providing the actuating signal and the cutting knife 27 reaching the

predetermined position. The control system 29 may then adjust the timing of subsequent actuating signals to reduce the variability in the time when the cutting knife 27 reaches the predetermined position relative to the synchronizing signal and hence the variability of the timing of the cut within the cutting cycle. The synchronization signal may occur earlier than the earliest possible time for providing the actuating signal.

Please replace paragraph [0036] with the following amended paragraph:

[0036] In another embodiment, the web advance system may provide positional synchronization signals that can be used to determine the position of the web advance system within the cutting cycle. Such synchronization signals may be provided by a sensor 31, such as a shaft encoder, ~~shaft encoder 31~~ on a part that rotates continuously throughout the cutting cycle. In one embodiment, the rotation of the motor 36 that drives the clamp activating cam 40 may provide such synchronization signals. Positional synchronization signals may be provided in another embodiment by a stepper motor where the signals that actuate the motor can be used to create positional synchronization signals. A sensor that detects a reference point may be used to correct accumulated errors in synchronization signals derived from stepper motor actuation signals.

Please replace paragraph [0037] with the following amended paragraph:

[0037] If the web advance system provides positional synchronization signals, the control system 29 may advance or retard the actuating signal within the cutting cycle by changing the selection of the particular positional synchronization signal used to trigger the actuating signal. The control system may use the positional synchronization signals

to determine if the cutting knife 27 arrived at the predetermined position, ~~based~~ based on the position signal provided by the ~~sensor 37,~~ sensor 37, 43 at a predetermined point in the cutting cycle. If the cutting knife 27 arrives at the predetermined position too soon within the cutting cycle, the controller 29 selects a later positional synchronization signal to trigger the actuating signal. If the cutting knife 27 arrives at the predetermined position too late within the cutting cycle, the controller 29 selects an earlier positional synchronization signal to trigger the actuating signal. If the rate of change of cutter speed is moderate, the timing adjustments based on positional synchronization signals may be sufficient to adjust the timing of the actuating signal as required by changes in the cutter speed.

Please replace paragraph [0039] with the following amended paragraph:

[0039] FIG. 6 shows a block diagram of an embodiment of the controller 29. A synchronization circuit 50 receives a synchronization signal from the web transport system. In the embodiment shown, ~~a sensor~~ the sensor 31 may provide the synchronization signal at a known point in the rotation of a motor 36 that drives a clamping cam 40. The synchronization signal provides a known point in each cutting cycle. An actuating circuit 53 provides an actuating signal to ~~a drive~~ the drive system 30 to cause the drive system to oscillate ~~a cutting~~ the cutting knife 27 from a resting position to an active position and back to the resting position. A position sensing circuit 51 receives a position signal from a knife position ~~sensor 37~~ sensor 37, 43 when the cutting knife 27 is at a predetermined position that is substantially different than the resting

position. The predetermined position may be substantially at a position where the cutting knife 27 is in contact with the web 110 prior to cutting the web.

Please replace paragraph [0040] with the following amended paragraph:

[0040] An adjusting circuit 52 is coupled to the synchronization circuit 50, the position sensing circuit 51, and the actuating circuit 53. The adjusting circuit 52 receives the synchronization signal and causes the actuating circuit 53 to provide the actuating signal to the drive system 30. The adjusting circuit 52 may wait for a delay time after receiving the synchronization signal before signaling the actuating circuit. The adjusting circuit receives the position signal from the position ~~sensor 37~~ sensor 37, 43 and determines if the cutting knife 27 has arrived at the predetermined position early or late in the cutting cycle. If the position signal is early, the adjusting circuit increases the delay time. If the position signal is late, the adjusting circuit decreases the delay time. Thus the adjusting circuit causes the actuating circuit to provide subsequent actuating signals so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal.

Please replace paragraph [0043] with the following amended paragraph:

[0043] FIG. 8 is a flow chart for another method of operation of the transverse web cutter when position synchronization signals are provided. The web cutter 10 advances 80 a web of material 110 past a cutting knife 27. A synchronization signal is received 81 indicating the progress of the cutting cycle. After waiting until the synchronization signal ~~equal~~ equals a target value 82, an actuating signal is provided 83 to cause a drive system

30 to oscillate the cutting knife 27 from a resting position to an active position and back to the resting position. A position signal is received 84 when the cutting knife 27 is at a predetermined position that is substantially different than the resting position. Subsequent actuating signals are adjusted so that the cutting knife arrives at the predetermined position at a predetermined time relative to the synchronization signal in response to the received position signal. If the positional signal is less than a goal value 85, the target value is increased 86 to cause the actuating signal to be provided later in the cutting cycle. If the position signal is greater than a goal value 87, the target value is decreased 88 causing the actuating signal to be provided earlier in the cutting cycle.

Please replace paragraph [0044] with the following amended paragraph:

[0044] What has been described is a machine and method for transverse cutting of products from a web at speeds which have heretofore been considered impractical for inexpensive cutting knives. Persons skilled ~~in the,~~ in the art will no doubt be able to make various modifications and adaptations of the invention but yet be within the inventive teachings disclosed both explicitly and implicitly herein. The limits of the invention sought to be protected are defined by the following claims.